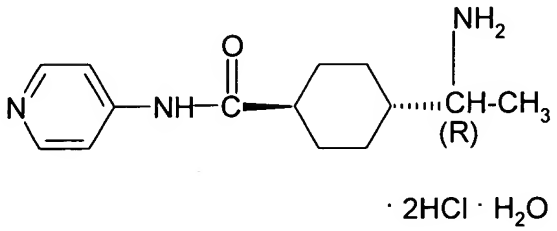
CLAIMS

What is claimed is:

1. A method for treating male or female sexual dysfunction which comprises administering a composition comprising a compound which attenuates RhoA and/or Rho-kinase activity in an organ subject to sexual stimulation and a pharmaceutically acceptable carrier to an individual in need of such treatment.

2. The method of claim 1 wherein said composition comprises a compound that inhibits the activity of Rho-kinase enzyme in an organ subject to sexual stimulation.

3. The method of claim 2 wherein said compound comprises the structure of formula (I) or a functional derivative thereof,



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wherein a functional derivative comprises a compound which can inhibit the activity of Rho-kinase mediated phosphorylation and thereby increase intracavernosal blood pressure (ICP) relative to mean arterial pressure (MAP).

4. The method of claim 2 wherein said compound that inhibits the activity of Rho-kinase enzyme is administered in a dose ranging from 2.0 to 400 nmol/kg body weight.

5. The method of claim 2 wherein said compound that inhibits the activity of Rho-kinase enzyme is administered in a dose ranging from 5.0 to 200 nmol/kg body weight.

6. The method of claim 2 wherein said compound that inhibits the activity of Rho-kinase enzyme is administered in a dose ranging from 40 to 100 nmol/kg body weight.

7. The method of claim 1 wherein said composition comprises a compound that reduces the amount of active Rho-kinase enzyme.

8. The method of claim 7 further comprising a compound that inhibits RhoA activity.

9. The method of claim 8 further comprising a compound that inhibits binding of GTP to RhoA enzyme.

10. The method of claim 8 further comprising a compound that inhibits translocation of RhoA enzyme to the cellular membrane.

11. The method of claim 8 wherein said composition comprises an inhibitor of Rho-kinase and a second compound which potentiates the effects of nitric oxide.

12. The method of claim 1 wherein said composition comprises a compound that acts on a downstream target of Rho-kinase such as myosin light chain phosphatase, calponin, myosin light chain, CPI-17, and others.

13. The method of claim 1 further comprising intracavernous administration of said composition.

14. The method of claim 1 further comprising topical administration of said composition.

15. The method of claim 1 further comprising oral administration of said composition.

16. The method of claim 1 further comprising sublingual administration of said composition.

17. The method of claim 1 further comprising nasal administration of said composition.

18. The method of claim 1 further comprising transurethral administration of said composition.

19. The method of claim 1 further comprising transrectal administration of said composition.

20. The method of claim 1 further comprising ionophoresis or electroporation for administration of said composition.

21. The method of claim 1 further comprising gene therapy to alter various proteins in the RhoA/Rho-kinase signal transduction pathway.

22. The method of claim 1 wherein the sexual dysfunction comprises sexual dysfunction associated with hypogonadism.

23. The method of claim 22 wherein said hypogonadism is associated with reduced levels of androgen hormones.

24. The method of claim 1 wherein the sexual dysfunction comprises sexual dysfunction associated with hypertension, diabetes, or pelvic surgery.

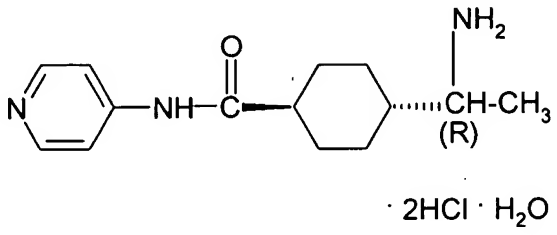
25. The method of claim 1 wherein the sexual dysfunction comprises sexual dysfunction associated with treatment of certain drugs such as those to treat hypertension, depression or anxiety.

26. A method to treat priapism in a patient comprising increasing the activity of the RhoA/Rho-kinase pathway in an organ subject to sexual stimulation in said patient.

27. A composition for treating male or female sexual dysfunction comprising a compound which attenuates RhoA and/or Rho kinase activity in an organ subject to sexual stimulation and a pharmaceutically acceptable carrier.

28. The composition of claim 27 further comprising at least one compound that inhibits the activity of Rho-kinase enzyme in an organ subject to sexual stimulation.

29. The composition of claim 28 further comprising a compound comprising the structure of formula (I) or a functional derivative thereof,



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wherein a functional derivative comprises a compound which can inhibit the activity of Rho-kinase mediated phosphorylation and thereby increase intracavernosal pressure (ICP) relative to mean arterial pressure (MAP).

30. The composition of claim 28 wherein said compound that inhibits the activity of Rho-kinase enzyme is administered in a dose ranging from 2.0 to 400 nmol/kg body weight.

31. The composition of claim 28 wherein said compound that inhibits the activity of Rho-kinase enzyme is administered in a dose ranging from 5.0 to 200 nmol/kg body weight.

32. The composition of claim 28 wherein said compound that inhibits the activity of Rho-kinase enzyme is administered in a dose ranging from 40 to 100 nmol/kg body weight.

33. The composition of claim 27 wherein said composition comprises a compound that reduces the amount of active Rho-kinase enzyme.

34. The composition of claim 33 wherein said composition comprises a compound that inhibits RhoA activity.

35. The composition of claim 34 wherein said composition comprises a compound that inhibits translocation of RhoA enzyme to the cellular membrane.

36. The composition of claim 34 wherein said composition comprises at least one compound that that inhibits binding of GTP to RhoA enzyme.

37. The composition of claim 34 wherein said composition comprises an inhibitor of Rho-kinase and a second compound which potentiates the effects of nitric oxide.

38. The composition of claim 27 wherein said composition comprises a compound that acts on a downstream target of Rho-kinase, such as myosin light chain phosphatase, calponin, myosin light chain, CPI-17, and others.

39. The composition of claim 27 wherein said composition is suitable for intracavernous administration.

40. The composition of claim 27 wherein said composition is suitable for topical administration.

41. The composition of claim 27 wherein said composition is suitable for oral administration.

42. The composition of claim 27 wherein said composition is suitable for sublingual administration.

43. The composition of claim 27 wherein said composition is suitable for nasal administration.

44. The composition of claim 27 wherein said composition is suitable for transurethral administration.

45. The composition of claim 27 wherein said composition is suitable for transrectal administration.

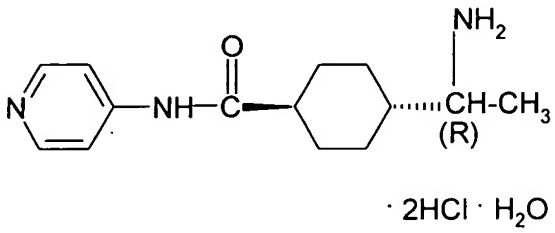
46. The composition of claim 27 wherein said composition is suitable for administration by ionophoresis or electroporation.

47. A kit for treating male or female sexual dysfunction comprising at least one compound which attenuates RhoA and/or Rho-kinase activity in an organ subject to sexual stimulation and a pharmaceutically acceptable carrier.

48. The kit of claim 47 further comprising aliquots packaged in units suitable for dispensing as individual dosages.

49. The kit of claim 47 wherein said compound inhibits Rho-kinase activity.

50. The kit of claim 49 wherein said compound comprises the structure of formula (I) or a functional derivative thereof,



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wherein a functional derivative comprises a compound which can inhibit the activity of Rho-kinase mediated phosphorylation and thereby increase intracavernosal blood pressure (ICP) relative to mean arterial pressure (MAP).